## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.00	Rating **	Α	Issue No.		10		
LM End	0.00	Issue Type +	Ma	Location *	N/A			
Catagonia Earthen Levee				GPS La	atitud	e/Longitude		
Category			Start		End			
Item	Operations & Maintenance					39.194083 °		
пеш	Manuals			-121.9355	12°	-121.935512 °		
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_10							
		Comn	nent Cod	le				
		Inspecto	or Comm	nent				
LMA has O+M manual.								

No Photos

LM Start	0.00	Rating **	Α	Issue No.		15	
LM End	0.00	Issue Type +	Ма	Location *		N/A	
Category	evee	GPS La	atitud	le/Longitude			
Category		Start		End			
Item	Emergend	39.1940	83°	39.194083 °			
пеш	Equipmer	-121.9355	12°	-121.935512 °			
DWR ID	DWR_ST0	003_01_f _ 2016	6_15				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
LMA has a stockpile of supplies.							

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Ctt	0.00	Rating **	Α	Issue No.		16		
LM Start	0.00	rtating	А	13306 140.		10		
LM End	0.00	Issue Type +	Ма	Location *		N/A		
Category	GPS La	atitud	le/Longitude					
Category		Start		End				
Item	Flood Pre	Training	39.1940	83°	39.194083°			
пеш				-121.935512 °		-121.935512 °		
DWR ID	DWR_ST0	003_01_f _ 2016	6_16					
		Comn	nent Cod	le				
	Inspector Comment							

The LMA attends annual training and maintains emergency response

plans.

No Photos

LM Start	0.00	Rating **	М	Issue No.		110
LM End	20.30	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS La	tituc	le/Longitude
Calegory			Start		End	
Item	Vegetatio	n		39.1941	00°	39.383865°
iteiii				-121.9355	68°	-121.990355°
DWR ID	DWR_ST0	003_01_s _ 201	8_110			

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

Remove the native vegetation from the landside slope.

### Photo 1 of 1: SP\_2018\_ST0003\_264\_110\_20180430\_00196.jpg



View of the native vegetation along the landside slope.

Photo 1 of 1: SP\_2018\_ST0003\_264\_111\_20180430\_00197.jpg

LM Start	0.00	Rating **	М	Issue No.		111
LM End	20.30	Issue Type +	Ма	Location *	WS	
Category	evee	GPS Latitude/Longitude				
Calegory	Category					End
Item	Vegetatio	n		39.19410	0 °	39.383865 °
пеш			-121.93556	8 °	-121.990355 °	
DWR ID	DWR_ST0	003_01_s _ 201	8_111			

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

## Inspector Comment

Remove the native vegetation from the waterside slope.



View of the native vegetation along the waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.11	Rating **	М	Issue No.		130		
LM End	0.14	Issue Type +	Ma	Location *	WS			
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Slope Sta	bility		39.1951	63°	39.195038°		
пеш				-121.9368	15 °	-121.937435°		
DWR ID DWR_ST0003_01_s _ 2017_130								
		Comn	nent Cod	de				
S1 : Repa	ir slope ins	tability.						
		Inspecto	or Comm	nent				
Repair the erosion along the waterside slope.								



View of the erosion along the waterside slope.

LM Start	0.24	Rating **	М	Issue No.		82	
LM End	0.24	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Slope Sta	bility		39.1952	34°	39.195234°	
item				-121.93912	24 °	-121.939124°	
DWR ID DWR_ST0003_01_f _ 2016_82							
Comment Code							

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

No Photos

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.42	Rating **	М	Issue No.		81
LM End	0.42	Issue Type +	Ma	Location *		WS
Earthen Levee				GPS La	atitud	le/Longitude
Category				Start		End
Item	Slope Sta	bility		39.1964	83°	39.196483°
пеш				-121.942228° -121.9422		
DWR ID DWR_ST0003_01_f _ 2016_81						
		Comn	nent Cod	le		
	ir the levee ere possib	slope damag le.	jed by ve	ehicle traffic	and	d prevent
		Inspecto	or Comm	nent		



View of the ruts along the waterside slope.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.51	Rating **	A/W	Issue No.		Issue No.		137
LM End	0.51	Issue Type +	Ма	Location *				
Supplemental Supplemental			GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR UC	DWR UCIP LMA Responsibility			28°	39.197028°		
пеш				-121.94359	)7 °	-121.943597°		
DWR ID								

## Inspector Comment

Comment Code

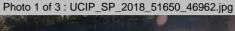
FS\_ID:51650 DS ID:17307 EP\_NO: 9534

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 10/27/2017 This structure is inspected annually under the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and Inspection Branch (FPIIB). (DWR UCIP - O. Magana)

4/24/2017 Both sides of crossing were underwater during site visit. Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD\_STRUCT\_DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)]. FS Date: 4/26/2017 9:46:51 AM

Rating \*\* A/W LM Start 0.51 Issue No. 137 (cont) Issue Type + 0.51 Ma Location \* LM End





Waterside view: overview towards CMP sewer pipe

#### Photo 2 of 3: UCIP\_SP\_2018\_51650\_46960.jpg



Waterside view: water flowing from CMP sewer pipe

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.51	Rating **	A/W	Issue No.		137 (cont)
LM End	0.51	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	DWR UCIP LMA Responsibility			28°	39.197028°
пеш				-121.94359	97°	-121.943597 °
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:51650 DS\_ID:17307 EP\_NO: 9534

Repair Type: No Action Needed Crossing Status: Found

FS Date: 4/26/2017 9:46:51 AM

UCIP Comments: 10/27/2017 This structure is inspected annually under the Structure and Channel Summer Inspection (part of the Levee Inspection Program) conducted by the DWR Flood Project Integrity and Inspection Branch (FPIIB). (DWR UCIP - O. Magana)

4/24/2017 Both sides of crossing were underwater during site visit. Will need to revisit after water levels drop. (DWR Sutter Yard-AFreitag)11/7/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/6/2016 Crossing appears to be in good condition.4/6/2015 Good Condition. No issues. Semi circle CMP half riser in inlet structure on LS. Inlet opeing has no trash rack, this may cause safety issue.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD\_STRUCT\_DESC: [Butte Slough Drainage Structure] 78-inch drainage pipe of an unknown material through the levee, 3 feet below the crown. Flap gate on the waterside (WS). Corrugated metal pipe (CMP) half riser (in a semi-circle configuration) in the inlet structure on the landside (LS). (78-inch pipe [HLM 0.44] authorized under Automatic Board Order (ABO) issued as Permit No. 9534, 1974 - Caleta). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 0.44)].

Photo 3 of 3: UCIP\_SP\_2018\_51650\_46961.jpg



Landside view: overview

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.54	Rating **	M	Issue No.		9	
LM End	0.68	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachments			39.1972	67°	39.198178°	
пеш					32°	-121.946412 °	
DWR ID DWR_ST0003_01_s _ 2017_9							
		Comn	nent Cod	le			
DE : Debri	S						
		Inspecto	or Comm	nent			
Remove th	ne debris fr	om the water	side slop	e.			



View of the debris along the waterside slope.

LM Start	1.17	Rating **	М	Issue No.		80
LM End	1.17	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Category				Start		End
Item	Slope Sta	bility		39.1941	26°	39.194126 °
пеш						-121.953345 °
DWR ID DWR_ST0003_01_f _ 2016_80						
		Comn	nent Cod	de		
S1 : Repa	ir slope ins	tability.				
		Inspecto	or Comm	nent		



View of the slope instability along the waterside slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139	
LM End	1.44	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.19250	)2 °	39.192502°
пеш				-121.95806	62 °	-121.958062 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51655 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossinyet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard- AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag) 12/13/2012 Water was flowing through this drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 - Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 4/26/2017 9:57:29 AM



Waterside view: overview of river bank

Rating

Location

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139 (cont)		
LM End	1.44	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Jalegory			Start		End	
Item	DWR UC	P LMA Respo	nsibility	39.1925	)2 °	39.192502°	
item				-121.9580	62 °	-121.958062°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:51655 DS ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossinyet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard- AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag) 12/13/2012 Water was flowing through this drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974 -Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 4/26/2017 9:57:29 AM



Waterside view: water flowing from outlet pipe (pipe fully submerge)

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	1.44	Rating **	U	Issue No.	139 (cont)		
LM End	1.44	Issue Type +	Ма	Location *			
Category	Catagoni Supplemental			GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.19250	)2°	39.192502°	
пеш				-121.95806	62 °	-121.958062°	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:51655 DS\_ID:17320 EP\_NO: 9543 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 WS was underwater during the site visit but I do not believe that any repairs have been made to this crossinyet. (DWR Sutter Yard- AFreitag)11/7/2016 No repairs have been made here yet. (DWR Sutter Yard- AFreitag)6/17/2016 River levels were down and the WS pipe end was exposed. WS end is completely rotten and damaged and flap gate has fallen off the end of the pipe (see pics). Pipe needs to be replaced or repaired. (DWR Sutter Yard afreitag)4/5/2016 Erosion on WS slope still present. Pipe still fully submerged on WS and discharging into river during site visit. (DWR UCIP - kfazel)4/6/2015 Pipe leaks during high water. DWR employee said he suspects that the flap gate has rotted and fallen off WS end of pipe. Could not locate WS end of pipe to confirm. Water was flowing through this drain during field survey. (DWR Sutter Yard afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/30/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/29/2013 Same as last inspection. (DWR Sutter Yard afreitag) 12/13/2012 Water was flowing through this drain during field survey. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe (at 45 degrees) through the levee, 25.2 feet below the crown. Flap gate on the waterside (WS), not found in 2016. (30-inch pipe [HLM 1.38] authorized under Automatic Board Order (ABO) issued as Permit No. 9543, 1974-Harada). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, revision March 1960 (HLM 1.38)] FS Date: 4/26/2017 9:57:29 AM

Photo 3 of 3: UCIP\_SP\_2018\_51655\_46990.jpg



Landside view: overview of levee slope

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

CR: Crown

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

		D :: ++	_				
LM Start	1.62	Rating **	С	Issue No.		83	
LM End	1.62	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Animal Co	ontrol		39.1908	35°	39.190835°	
item				-121.9606	28 °	-121.960628 °	
DWR ID	DWR_ST0	003_01_f _ 2010	6_83				
		Comn	nent Cod	le			
A1 : Exteri	minate rod	ents and back	fill and o	compact or	grou	t burrows.	
		Inspecto	or Comm	nent			
The rodent holes was repaired along the landside slope.							

No Photos

LM Start	2.45	Rating **	М	Issue No.		86		
LM End	2.46	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		39.1879	11°	39.187955 °		
пеш					91 °	-121.974693 °		
DWR ID	DWR_ST0	003_01_f _ 2016	5_86					
		Comn	nent Cod	le				
T1 : Trim t	rees to at	least five feet	above g	round level.				
Inspector Comment								

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	2.56	Rating **	М	Issue No.		143
LM End	2.56	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	WR UCIP LMA Responsibility			88°	39.188768 °
пеш				-121.97630	)5 °	-121.976305 °
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:51660 DS ID:17309 EP\_NO: 9541

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 4/26/2017 10:46:22 AM

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection. FIELD\_STRUCT\_DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)].

LM Start	2.56	Rating **	М	Issue No.	143 (cont)
LM End	2.56	Issue Type +	Ma	Location *	



Waterside view: overview- concrete surg tank





Waterside view: overview- concrete surg tank

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	2.56	Rating **	М	Issue No.		143 (cont)	
LM End	2.56	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	WR UCIP LMA Responsibility			68°	39.188768 °	
пеш				-121.9763	05 °	-121.976305 °	
DWR ID							

## Comment Code

#### Inspector Comment

FS\_ID:51660 DS\_ID:17309 EP\_NO: 9541 Repair Type: Nor

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Still no sign of WS pipe end or flapgate. LS appears to be in good condition. (DWR Sutter Yard- AFreitag)

11/7/2016 LS culvert measured to be 30"wide X 30"tall. WS end is not vidible so could not be measured. (DWR Sutter Yard-AFreitag)6/6/2016 Cannot locate the WS headwall/flapgate. Appears to have been silted over.4/6/2015 Same as last inspection. Concrete surg box on WS. Flap gate in concrete. "LI" headwall at the waterward

surg box on WS. Flap gate in concrete "U" headwall at the waterward end- not found.6/30/2014 Same as last inspection.12/30/2013 Same as last inspection.7/29/2013 Same as last inspection.
FIELD\_STRUCT\_DESC: 30-inch reinforced concrete box drainage culvert through the levee, 14.3 feet below the crown. 30-inch corrugated metal pipe connects concrete culvert from slide gate out to flap gate on the waterside (WS) end. Slide gate in a concrete riser on the waterside (WS) slope. (30-inch pipe [HLM 2.49] authorized under Automatic Board Order (ABO) issued as Permit No. 9541, 1974 - Wilbur, McGowan, Zinke). [Additional Reference(s): DWR Levee Logs, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 2.49)].

FS Date: 4/26/2017 10:46:22 AM



Waterside view: slide gate inside concrete surg tank

LM Start	2.84	Rating **	М	Issue No.		104	
LM End	2.84	Issue Type +	Ma	Location *	WS		
Catagony	Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	Slope Stability		39.1911	62°	39.191162°	
item		-121.980365 °		-121.980365 °			
DWR ID	DWR STO	003 01 s 201	8 104				

#### Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Repair the erosion along the water side slope caused by vehicle traffic.

## Photo 1 of 1: SP\_2018\_ST0003\_264\_104\_20180312\_00185.jpg



View of the erosion along the waterside slope caused by vehicle traffic.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	3.34	Rating **	U	Issue No.		144
LM End	3.34	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	DWR UCIP LMA Responsibility		39.19712	5°	39.197125°
пеш				-121.98538	9°	-121.985389°
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:51665 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

LM Start

LM End

3.34

3.34

UCIP Comments: 4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. Pipe silted over on both ends. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 4/26/2017 12:09:42 PM

U

Ma

Issue No.

Location 3

Rating \*\*

Issue Type +

144 (cont)

## Photo 1 of 3 : UCIP\_SP\_2018\_51665\_76919.jpg



LS view of water exiting the pipe.

#### Photo 2 of 3: UCIP\_SP\_2018\_51665\_76920.jpg



LS view from levee shoulder

* Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CR · Crown	

\* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	3.34	Rating **	U	Issue No.	144 (cont)		
LM End	3.34	Issue Type +	Ma	Location *			
Category Supplemental			GPS Latitude/Longitude				
				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.1971	25 °	39.197125°	
пеш				-121.9853	89°	-121.985389°	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:51665 DS\_ID:17311 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/6/2017 Pipe was found in January 2017 during a high water event when water uncovered the buried WS end which led to uncontrolled water flow through during the high water event. The WS pipe opening was temporarily blocked off by plywood and sandbags until the pipe can be properly plugged or abandoned. Pics updated. (DWR Sutter Yard- Afreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate.4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate.7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Slide gate on the waterside (WS) end. Pipe silted over on both ends. (Automatic Board Order (ABO) issued as Permit No. 9539, 1974 - Locvich). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.25)]. FS Date: 4/26/2017 12:09:42 PM

## Photo 3 of 3: UCIP\_SP\_2018\_51665\_76921.jpg



WS view of the temporary plug on WS end.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	3.68	Rating **	М	Issue No.	146	
LM End	3.68	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.201831°		39.201831 °
пеш				-121.98400	)6°	-121.984006°
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51666 DS\_ID:17313 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/24/2017 Slide gate structure found on WS about 10ft from levee toe. Vegetation was too thick to see if there were any more appurtances associated with this crossing visible on the WS. Nothing was visible on the LS. House located above pipe alignment at LS levee toe. Crossing appears abandoned and should be done so properly. (DWR Sutter Yard- AFreitag)11/7/2016 Unable to locate. (DWR Sutter Yard- AFreitag)6/6/2016 Unable to locate. 4/6/2015 Unable to locate.6/30/2014 Unable to locate.12/30/2013 Unable to locate7/29/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Slide gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 3.6)]. FS Date: 4/26/2017 12:11:41 PM

LM St	tart	3.68	Rating **	М	Issue No.	146 (cont)
LM E	nd	3.68	Issue Type +	Ma	Location *	

# Photo 1 of 2 : UCIP\_SP\_2018\_51666\_77004.jpg



Slide gate structure found on WS

#### Photo 2 of 2: UCIP\_SP\_2018\_51666\_77005.jpg



View of WS from levee shoulder

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	4.75	Rating **	М	Issue No.		105
LM End	4.76	Issue Type +	Ma	Location *	WS	
Category	Category Earthen Levee				titud	e/Longitude
Calegory						End
Item	Vegetation			39.21350	9°	39.213665 °
Item				-121.99199	93 °	-121.992220 °
DWR ID	DWR_ST0	003_01_f _ 2016	6_105			
		Comn	nent Cod	le		
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						

No Photos

LM Start	6.47	Rating **	М	Issue No.		99	
LM End	6.47	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Vegetatio	n		39.2247	19°	39.224719°	
iteiii			-121.9986	23 °	-121.998623 °		
DWR ID	VR ID DWR_ST0003_01_f _ 2016_99						
		_	. ^				

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment



View of the overgrown vegetation along the landside slope.

LM Start	6.47	Rating **	М	Issue No.		106
LM End	6.47	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	Encroachments			39.2248	12°	39.224812 °
пеш			-121.9986	15 °	-121.998615°	
DWR ID	DWR_ST0003_01_s _ 2018_106					
Comment Code						

TR: Tree or limb

#### Inspector Comment

Remove the down tree from the landside slope.



View of the downed tree along the landside slope.

* Location		** Rating	
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/F
WS: Water Side		M : Minimally Acceptable	C : Corrected
CR : Crown		U : Unacceptable	A/W : Acceptable but

+ Issue Type Ma : Mainter

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Rated

t Monitor & Maintain

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	6.75	Rating **	С	Issue No.		96	
LM End	6.75	Issue Type +	Ма	Location *		LS	
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item Slope Stability				39.2282	91 °	39.228291 °	
				-121.998579 °		° -121.998579 °	
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_96						
		Comn	nent Cod	le			
S1 : Repai	ir slope ins	tability.					
			_				
		Inspecto	or Comm	nent			
The landsi	de slope w	as repaired.					

No Photos

LM Start	6.75	Rating **	М	Issue No.		97	
LM End	6.75	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		39.2282	91 °	39.228291 °	
item				-121.9985	79°	-121.998579 °	
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_97						
		Comn	nent Cod	de			
S1 : Repai	ir slope ins	tability.					
		Inspecto	or Comm	nent			

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	6.76	Rating **	М	Issue No.		136	
LM End	6.79	Issue Type +	Ma	Location *		WS	
Category Supplemental			GPS La	titud	e/Longitude		
				Start		End	
Itom	2017 Storm Damage			39.2283	11 °	39.228730	0
пеш	Item				55 °	-121.998109	0
DWR ID	DWR_ST0003_01_f _ 2017_136						
Comment Code							

## Inspector Comment

Levee Evaluation Comments

Description: Site ID No:11

Site Designation:DWR\_ST0003\_01\_s\_2012\_30

Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: Rodent activity seems to be the source of the problem. Local runoff/rainfall eroded the rodent holes to an advanced state of erosion that could continue with future exposure to wet conditions. Simple fix for the issue would be to grout the holes. Problem levee is a set-back levee.

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160
LM End	7.72	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.23945	8°	39.239458°
пеш				-121.99339	8°	-121.993398 °
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned and erosion still present near WS box.(DWR Sutter Yard-Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015 Silted concrete box on WS. Depression/erosion around concrete box on WS.Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 7.73)].

FS Date: 4/26/2017 2:38:29 PM

LM Start	7.72	Rating **	М	Issue No.	160 (cont)
LM End	7.72	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2018\_51695\_77008.jpg



Depression around WS concrete box

#### Photo 2 of 3: UCIP\_SP\_2018\_51695\_77009.jpg



depression around WS concrete box

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	7.72	Rating **	М	Issue No.		160 (cont)	
LM End	7.72	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
Item	DWR UC	IP LMA Respo	onsibility	39.2394	58°	39.239458°	
пеш				-121.9933	98 °	-121.993398°	
DWR ID							
Comment Code							

## Inspector Comment

FS\_ID:51695 DS\_ID:17301 EP\_NO: 9532

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- erosion/depression present around the WS box (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned and erosion still present near WS box.(DWR Sutter Yard-Afreitag)6/1/2016 Appears to be an abandoned crossing.4/1/2015 Silted concrete box on WS. Depression/erosion around concrete box on WS.Silted concrete box on WS. Depression/erosion around concrete box on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch by 48-inch reinforced concrete box drainage culvert through the levee, 11.6 feet below the crown. Slide gate in a concrete box on the waterside (WS) slope. (3-foot by 4-foot culvert [HLM 7.73] authorized under Automatic Board Order (ABO) issued as Permit No. 9532, 1974 - Martin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M

Manual 136, March 1960 (HLM 7.73)]. FS Date: 4/26/2017 2:38:29 PM



WS concrete box full of silt.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.		161			
LM End	8.32	Issue Type +	Ma	Location *					
Category	Supplemental			Supplemental			GPS La	tituc	le/Longitude
Calegory	Category					End			
Item	DWR UCI	P LMA Respo	onsibility	39.2463 <sup>-</sup>	17°	39.246317°			
пеш	item			-121.99882	25 °	-121.998825 °			
DWR ID									

## Comment Code

#### Inspector Comment

FS\_ID:51698 DS ID:17304 EP\_NO: 9529

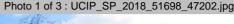
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM

LM Start	8.32	Rating **	M	Issue No.	161 (cont)
I M End	8.32	Issue Type +	Ma	Location *	





Crown view: overview (both sides of the levee)

Photo 2 of 3: UCIP\_SP\_2018\_51698\_47201.jpg



Waterside view: overview of CMP riser

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.32	Rating **	М	Issue No.		161 (cont)	
LM End	8.32	Issue Type +	Ma	Location *			
Category			GPS La	titud	le/Longitude		
Calegory			Start		End		
Itom	DWR UC	IP LMA Respo	onsibility	39.2463	17°	39.246317°	
item	Item			-121.99882	25 °	-121.998825 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:51698 DS ID:17304 EP\_NO: 9529

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned (DWR Sutter Yard- Afreitag)6/1/2016 Abandoned- only WS riser and slide gate found.4/1/2015 CMP riser and slide gate on WS. LS distribution box is silted in. Looks abandoned. CMP riser with slide gate on WS. Concrete distribution box on LS- full with silt.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, invert 12.8 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete box at the landside (LS) toe. (24-inch pipe [HLM 8.35] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Company). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.35)].

FS Date: 4/26/2017 2:54:54 PM



Landside view: overview of concrete box

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.	163			
LM End	8.52	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.2491	25°	39.249125	0	
пеш				-121.9990	31 °	-121.999031	0	
DWR ID								
	Comment Code							

## Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard-

Yard- Afreitag) 10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM



Waterside view: overview of CMP riser

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163 (cont)	
LM End	8.52	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UC	IP LMA Respo	nsibility	39.24912	25 °	39.249125 °	
пеш				-121.99903	31 °	-121.999031 °	
DWR ID							
Comment Code							

## Inspector Comment

FS\_ID:51725 DS\_ID:17295 EP\_NO: 9529

Repair Type: No Action Needed
Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type

logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil.Only a CMP

last inspection.
FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)]
FS Date: 5/1/2017 8:37:22 AM

inspection.12/18/2013 Same as last inspection.7/23/2013 Same as

riser with slide gate found on WS.6/30/2014 Same as last

#### Photo 2 of 3: UCIP\_SP\_2018\_51725\_47207.jpg



Landside view: overview (no pipes)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.52	Rating **	A/W	Issue No.		163 (cont)	
LM End	8.52	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.24912	25 °	39.249125 °	
пеш		,			81 °	-121.999031 °	
DWR ID							

#### Inspector Comment

Comment Code

FS\_ID:51725 DS ID:17295 EP\_NO: 9529

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/21/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 9529, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter

Yard- Afreitag) 10/31/2016 Abandoned. (DWR Sutter Yard-Afreitag)6/13/2016 Pipe was exposed and camera inspected by Nor-Cal Pipeline Services 10/29/2015. Photos of the exposed pipe ends were uploaded on 4/1/2015. The internal inspection showed some signs of rust but no visible holes or deterioration were found. After the inspection the pipe ends were capped and reburied.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/4/2016 Proper abandonment of pipe is needed. Pipe has been buried again after it was dug up and video inspected, so was not visible on LS. Note that landowner has regraded LS slope so drainage is now to the east (toward LS).4/1/2015 Both WS and LS pipe ends have been dug up in preparation for an internal camera inspection. Pipe shows signs of heavy rust and both ends of pipe are plugged with soil. Only a CMP riser with slide gate found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch irrigation and drainage pipe through the levee, invert 11.5 feet below the crown. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. (24-inch pipe [HLM 8.55] authorized under Automatic Board Order (ABO) issued as Permit No. 9529, 1974 - Dorwood Ranching Co.) [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.55)] FS Date: 5/1/2017 8:37:22 AM



WS pipe end

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164
LM End	8.56	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.24967	78°	39.249678 °
пеш				-121.99902	21 °	-121.999021 °
DWR ID						

# Comment Code

Inspector Comment

FS\_ID:51726 DS ID:17327 EP\_NO: 9528

LM End

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM

Rating \*\* Issue No. LM Start 8.56 164 (cont) 8.56 Issue Type + Location \*



Waterside view: overview

#### Photo 2 of 3: UCIP\_SP\_2018\_51726\_47209.jpg



Waterside view: burried slide gate

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.56	Rating **	М	Issue No.		164 (cont)		
LM End	8.56	Issue Type +	Ma	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.2496	78°	39.249678 °		
пеш				-121.99902	21 °	-121.999021 °		
DWR ID								

## Comment Code

#### Inspector Comment

FS\_ID:51726 DS\_ID:17327 EP\_NO: 9528

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected by Nor-Cal Pipeline Services on

10/29/2015. Pipe length through levee is 75.1ft long. The inspection showed some signs of rust but no holes or other deterioration were found. Pics of exposed pipe ends were uploaded on 4/1/2015. After the inspection the pipe ends were capped and reburied.4/14/2016-Same as last inspection.4/1/2015- Both ends of pipe have been dug up in preparation for internal camera inspections. Pipe shows some rust but appears to be in decent shape. Only buried slide gate structure found.6/30/2014- Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 12.5 feet below the crown. Slide gate on the waterside (WS). (Automatic Board Order (ABO) issued as Permit No. 9528, 1974 - Lamb). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.59)]. FS Date: 5/1/2017 8:51:02 AM



WS pipe end

LM Start	8.65	Rating **	М	Issue No.		94		
LM End	8.65	Issue Type +	Ma	Location *		LS		
Cotagon Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Encroach	ments		39.2507	74°	39.250774	0	
пеш		-121.9982	42 °	-121.998242	0			
DWR ID DWR_ST0003_01_f _ 2016_94								
Comment Code								

TR : Tree or limb

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.		166
LM End	8.75	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory	Calegory			Start		End
Item	DWR UC	P LMA Respo	onsibility	39.2521	21 °	39.252121 °
пеш				-121.9977	40°	-121.997740 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51729 DS\_ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard- Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard-Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard-afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP-kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24-inch corrugated metal pipe through the levee, 16.7 feet below the crown. Annular space has been pressure grouted. Slide gate on the waterside (WS) end. Gate valve at the landside (LS) toe. (Permit No. 4491, 1964 - Blackmore). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.74)]. FS Date: 5/1/2017 9:06:02 AM



Waterside view: overview of slide gate on steel structure (belongs to crossing at CLM-8.782)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.		166 (cont)
LM End	8.75	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	alegory			Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.2521	21 °	39.252121 °
пеш				-121.9977	40°	-121.997740 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51729 DS\_ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard- Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard-Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard-afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP-kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24-inch corrugated metal pipe through the levee, 16.7 feet below the crown. Annular space has been pressure grouted. Slide gate on the waterside (WS) end. Gate valve at the landside (LS) toe. (Permit No. 4491, 1964 - Blackmore). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.74)]. FS Date: 5/1/2017 9:06:02 AM



Waterside view: slide gate on steel structure (belongs to crossing at CLM-8.782)

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.75	Rating **	U	Issue No.	166 (cont)		
LM End	8.75	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCIP LMA Responsibility			39.25212	1°	39.252121 °	
пеш				-121.99774	0 °	-121.997740°	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:51729 DS ID:17353 EP\_NO: 4491 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/19/2017 4in. pipe still showing signs of deterioration near WS toe. (DWR Sutter Yard- Afreitag)10/31/2016 Pipe still exposed along the WS toe and is rusted and corroded. If it is still in use by the owner then it should be rebuilt.(DWR Sutter Yard-Afreitag)6/13/2016 Pipe was dug up on WS and photographed. It was originally selected for internal inspection but was unable to be as there was no access to the inside of the 4" pipe. (DWR Sutter Yard afreitag)4/14/2016 Signs of corrosion on pipe and valve on LS. Pipe in use according to Bryan Reniff of Sutter Yard. (DWR UCIP kfazel)8/28/2015 Pipe was dug up and located on the WS levee toe. (DWR Sutter Yard - afreitag)6/30/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/18/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/23/2013 Same as last inspection. (DWR Sutter Yard - afreitag)12/11/2012 Only abandoned slide gate found on WS. (DWR UCIP - pamatya)

FIELD\_STRUCT\_DESC: 4-inch steel drainage pipe sleeved through 24inch corrugated metal pipe through the levee, 16.7 feet below the crown. Annular space has been pressure grouted. Slide gate on the waterside (WS) end. Gate valve at the landside (LS) toe. (Permit No. 4491, 1964 - Blackmore). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 8.74)]. FS Date: 5/1/2017 9:06:02 AM

Photo 3 of 3: UCIP\_SP\_2018\_51729\_47214.jpg

Waterside view: close view of slide gate (belongs to crossing at CLM-8.782)

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	8.92	Rating **	N	Issue No.		92			
LM End	8.92	Issue Type +	Ma	Location *		LS			
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Trim / Thi	n Trees		39.2545	63°	39.254563 °			
пеш			-121.997493 °		-121.997493°				
DWR ID DWR_ST0003_01_f _ 2016_92									
Comment Code									
T5 : Tree s	stumps.								
Inspector Comment									

No Photos

LM Start	9.03	Rating **	N	Issue No.		91			
LM End	9.03	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Item	Trim / Thi	n Trees		39.2561	41 °	39.256141 °			
пеш	item				85 °	-121.997785 °			
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_91								
		Comn	nent Cod	le					
T5 : Tree s	stumps.								
Inspector Comment									

No Photos

LM Start	9.17	Rating **	N	Issue No.		90				
LM End	9.17	Issue Type +	Ма	Location *	LS					
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Calegory				Start		End				
Item	Trim / Thi	n Trees		39.2576	88°	39.257688 °				
item				-121.999331 °		-121.999331 °				
DWR ID DWR_ST0003_01_f _ 2016_90										
		Comn	nent Cod	le						
T5 : Tree s	stumps.									
			_							
		Inspecto	or Comm	nent						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	9.35	Rating **	С	Issue No.		124		
LM End	9.35	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		39.2596	75°	39.259675 °		
пеш				-122.0009	50°	-122.000950 °		
DWR ID DWR_ST0003_01_s _ 2017_124								
		Comn	nent Cod	de				
TR : Tree	or limb							
		Inspecto	or Comm	nent				
The tree was removed from the water side toe.								

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

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## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.	167		
LM End	9.37	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.2600	34°	39.260034°	
пеш	item				70°	-122.000970 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)].

FS Date: 5/1/2017 9:16:26 AM

LM Start	9.37	Rating **	A/W	Issue No.	167 (cont)
I M End	9.37	Issue Type +	Ma	Location *	



Waterside view: overview

Photo 2 of 3: UCIP\_SP\_2018\_51731\_47241.jpg



Waterside view: overview of CMP pipe

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	9.37	Rating **	A/W	Issue No.	167 (cont)		
LM End	9.37	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
ltem DWR UCIP LMA Responsibility				39.260034°		39.260034 °	
				-122.000970 °		-122.000970 °	
DWR ID							
Comment Code							

#### Inspector Comment

FS\_ID:51731 DS\_ID:17355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- Afreitag)10/31/2016 Abandoned. (DWR Sutter Yard- Afreitag)6/13/2016 Pipe was internally cleaned and camera inspected on 10/30/2015 by Nor-Cal Pipeline Services. WS cap was removed and 100.6ft of pipe were inspected starting from the WS opening. Inspection revealed rusting but no visible holes or other deterioration were found. Pipe was recapped after the inspection. This pipe is always visible so no new photos were taken during the inspection.6/9/2016 Khalida Fazel of UCIP requests that any photos of the pipe when it was exposed for a video inspection be kindly uploaded here.4/1/2015 Pipe is in same condition. It has been selected for an internal camera inspection. New CMP pipe on WS capped with steel plate.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13.5 feet below the crown. Slide gate on the landside (LS) headwall. Steel plate welded on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 9.4)].

FS Date: 5/1/2017 9:16:26 AM



Waterside view: capped CMP pipe

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	10.35	<b>0.35</b> Rating ** A/W		Issue No.		168	
LM End	10.35	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.27049	92 °	39.270492 °	
пеш				-122.00130	06°	-122.001306°	
DWR ID							

#### Comment Code

#### Inspector Comment

FS\_ID:51734 DS\_ID:17358 EP\_NO: 9517

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard- Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM

LM Start	10.35	Rating **	A/W	Issue No.	168 (cont)
I M End	10.35	Issue Type +	Ma	Location *	



Crown view: overview (both sides of the levee)

Photo 2 of 3: UCIP\_SP\_2018\_51734\_47262.jpg



Waterside view: overview of CMP riser

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	10.35	Rating **	A/W	Issue No.		168 (cont)
LM End	10.35	Issue Type +	Ма	Location *		
Category				GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.27049	2 °	39.270492 °
пеш				-122.00130	6°	-122.001306 °
DWR ID						

# Inspector Comment

Comment Code

FS\_ID:51734 DS\_ID:17358 EP\_NO: 9517

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/19/2017 No WS end found/ slide gate handle broken. (DWR Sutter Yard- Afreitag)10/31/2016 Slide gate handle is broken and no WS pipe end can be located. (DWR Sutter Yard-Afreitag)6/1/2016 WS slide gate handle is still broken. No WS pipe end was found.4/1/2015 Slide gate handle is still broken. The rest of the pipe appears in good condition. Broken slide gate handle found on WS.6/30/2014 Same as last inspection.12/18/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate in a concrete distribution box on the landside (LS) toe. (48-inch pipe [HLM 10.39] authorized under Automatic Board Order (ABO) issued as Permit No. 9517, 1974 - Griffin). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 10.47)].

FS Date: 5/1/2017 9:32:45 AM



Waterside view: inside CMP riser

LM Start	10.36	Rating **	M	Issue No.	5		
LM End	10.36	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	titud	le/Longitude		
Category	Category			Start		End	
Item	Vegetatio	n		39.27050	)3°	39.270503	0
пеш				-122.0013	39°	-122.001339	0
DWR ID	DWR_ST0	003_01_s _ 201	2_5				
	Comn	le					

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

The Elderberry is partially blocking visibility.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	11.53	Rating **	М	Issue No.		8
LM End	11.79	Issue Type +	Ma	Location *		WS
Category				GPS La	atitud	le/Longitude
Calegory		Start		End		
Item		CE Erosion S	Survey,	39.2799	10°	39.283853 °
item	DRAFT			-122.0182	21 °	-122.016113 °
DWR ID	VR ID DWR_ST0003_01_s _ 2016_8					
Comment Code						

#### Inspector Comment

2008 - Large rotational/mass failure in the bank with tree slump. 2009 - Minimal new erosion, the tree is leaning further into the river. 2011 - Site extended downstream. 2012 - Minor new erosion and tree roots are further exposed. 2015: Last observed in 2013. [2015 Site ID: SAC\_152-6\_L]



USACE 2013 Photo #1

LM Start	11.85	Rating **	М	Issue No.		1
LM End	11.90	Issue Type +	Ma	Location *	WS	
Category Supplemental			GPS La	atitud	e/Longitude	
			Start		End	
Item		CE Erosion S	Survey,	39.3314	47°	39.332716°
item	DRAFT			-122.0294	40°	-122.029953 °
DWR ID	DWR_ST0003_01_s _ 2016_1					
Comment Code						

# Inspector Comment

2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet.

2010 - Some new toe scour. 2015: Last observed in 2013. [2015 Site

ID: SAC\_157-7\_R]



USACE 2013 Photo #1

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	11.85	Rating **	М	Issue No.	13	
LM End	11.90	Issue Type +	Ma	Location *	WS	
Supplemental			GPS La	tituc	le/Longitude	
Calegory	Category			Start		End
Item		CE Erosion S	Survey,	39.28456	88°	39.285298 °
пеш	DRAFT			-122.01569	00°	-122.015208°
DWR ID	003_01_s _ 201	6_13				
	Comn	nent Coo	le			

#### Inspector Comment

2006 - Large rotational/mass failure in the bank with tree slump. Tough clayey toe material. 2007 - Site is between stone revetments with a pump station at the downstream end. 2010 - Erosion is into the levee toe. 2011 - Minor new erosion. 2012 - Minor new erosion. 2015: Last observed in 2013. [2015 Site ID: SAC\_152-8\_L]



USACE 2013 Photo #1

LM Start	12.04	Rating **	С	Issue No.	77	
LM End	12.04	Issue Type +	Ма	Location *	LS	
Catagory Earthen Levee				GPS La	tituc	le/Longitude
Category				Start		End
Item	Animal Co	ontrol		39.28695	8°	39.286958°
пеш				-122.01403	33°	-122.014033 °
DWR ID	DWR ID DWR_ST0003_01_f _ 2016_77					·
Comment Code						

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

The rodent holes was repaired along the landside slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.	176	
LM End	13.38	Issue Type +	Ma	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.3060	65 °	39.306065 °
пеш				-122.0131	12 °	-122.013112 °
DWR ID						
Comment Code						

# Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection. Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: CMP riser with slide gate

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.		176 (cont)	
LM End	13.38	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	onsibility	39.3060	65 °	39.306065 °		
пеш				-122.0131	12 °	-122.013112 °	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection. Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM



Waterside view: overview of CMP riser and outlet pipe

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	13.38	Rating **	М	Issue No.		176 (cont)	
LM End	13.38	Issue Type +	Ma	Location *			
Category	Suppleme	ental	ntal			le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.306065°		39.306065 °	
пеш				-122.0131	12 °	-122.013112°	
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:51749 DS\_ID:17340 EP\_NO: 9511

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. A oak tree has fallen down onto the WS pipe end. It does not appear to have damaged the pipe but it will need to be better inspected after the tree has been cleared away. (DWR Sutter Yard- AFreitag)10/31/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/6/2015 by Nor-Cal Pipeline Services. The 48" cmp pipe section that runs through the levee was deemed to be in good condition. After the LS levee toe the pipe changes to a 48" concrete box culvert for under the roadway and that showed signs of some cracking. After the inspection the WS end was capped to keep sediment out until further abandonment can be achieved.4/16/2016 A wooden board has been placed on WS outlet of pipe to prevent sediment from entering pipe. This is a temporary repair measure by Sutter Yard until pipe can be grouted. Need to contact owner to ensure pipe's proper abandonment. Blockage of pipe outlet by wooden board or sediment will pose a hazard during high water. Pipe owner unclear, as landowner differs on LS and WS.4/2/2015 Pipe has been selected for internal camera inspection. Outlet pipe silted on WS. Inlet structure damaged on LS. Not properly abandoned.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Landside (LS) end of pipe on east side of River Road. Pipe is not in use but is operable. (48-inch pipe [HLM 13.37] authorized under Permit No. 9511, 1974 - Moresco). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 13.37)].

FS Date: 5/1/2017 10:27:34 AM

# Photo 3 of 3: UCIP\_SP\_2018\_51749\_47341.jpg

Waterside view: silted concrete lined CMP outlet pipe

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

		II.							
LM Start	13.43	Rating **	М	Issue No.		75			
LM End	13.43	Issue Type +	Ma	Location *	WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
			Start		End				
Item	Slope Sta	bility		39.3069	19°	39.306919 °			
пеш			-122.013076 °		° -122.013076				
DWR ID	DWR_ST0	DWR_ST0003_01_f _ 2016_75							
		Comn	nent Coo	de					
S3 : Repai access wh		slope damaç le.	ed by ve	ehicle traffic	and	prevent			
Inspector Comment									



View of the slope instability along the waterside slope.

LM Start	14.32	Rating **	С	Issue No.		73		
LM End	14.32	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category						End		
Trim / Thin Trees			39.3187	93 °	39.318793°			
пеш			-122.015832 °		-122.015832 °			
DWR ID	DWR_ST0	DWR_ST0003_01_f _ 2016_73						
		Comn	nent Cod	le				
T1 : Trim t	rees to at	least five feet	above g	round level.				
	Inspector Comment							
The tree limb was removed from the landside slope.								
	·							

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	<b>14.50</b> Rating ** A/V		A/W	Issue No.		178
LM End	14.50	Issue Type +	Ма	Location *		
Category Supplemental			GPS La	tituc	le/Longitude	
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	39.32142	29°	39.321429°
пеш				-122.01607	79°	-122.016079 °
DWR ID						

## Comment Code

#### Inspector Comment

FS\_ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag) 10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard-AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved.4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

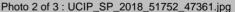
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

 LM Start
 14.50
 Rating \*\*
 A/W
 Issue No.
 178 (cont)

 LM End
 14.50
 Issue Type +
 Ma
 Location \*



Waterside view: CMP riser with slide gate





Waterside view: levee mile marker

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	14.50	Rating **	A/W	Issue No.	178 (cont)		
LM End	14.50	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.3214	29°	39.321429	0
пеш				-122.0160	79°	-122.016079	0
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:51752 DS\_ID:17330 EP\_NO: 9508

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)10/31/2016 Appears abandoned. WS pipe end buried. (DWR Sutter Yard-AFreitag)6/14/2016 Pipe was internally cleaned and camera inspected on 11/17/2015 by Nor-Cal Pipeline Services. Pipe section through levee is 86ft long and showed some signs of rusting but no visible holes or other deterioration was found. After the inspection the WS end was capped and reburied until further abandonment can be achieved.4/14/2016 Concrete box on LS cleared of sediment.4/2/2015 Same as last inspection. Concrete box on LS silted in. If abandoned it should be done so properly.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/23/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 14 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete distribution box on the landside (LS). (24-inch pipe [HLM 14.5] authorized under Automatic Board Order (ABO) issued as Permit No. 9508, 1974 - Jones). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 14.5)]. FS Date: 5/1/2017 10:34:48 AM

Photo 3 of 3: UCIP\_SP\_2018\_51752\_47360.jpg



Landside view: overview of distribution box

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184		
LM End	16.30	Issue Type +	Ma	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Category				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.3441	77°	39.344177°		
пеш				-122.0243	00°	-122.024300 °		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard-AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.29)]. FS Date: 5/1/2017 10:41:07 AM

LM Start	16.30	Rating **	M	Issue No.	184 (cont)
LM End	16.30	Issue Type +	Ma	Location *	



View from crown down WS slope at location of crossing.

#### Photo 2 of 3: UCIP\_SP\_2018\_51759\_75097.jpg



View of LS from crown at location of crossing.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		184 (cont)			
LM End	16.30	Issue Type +	Ма	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory	y			Start		End			
Item	DWR UCI	DWR UCIP LMA Responsibility			77°	39.344177°			
пеш				-122.02430	00°	-122.024300 °			
DWR ID									

# Comment Code

#### Inspector Comment

FS\_ID:51759 DS\_ID:17337 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. Pipe is buried and not visible but a white marker on WS shoulder shows its location. (DWR Sutter Yard-AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe section through the levee is 88ft long and showed signs of rusting but no holes or other deterioration was found. The WS flap gate was broken during excavation but doesnt pose an issue as the pipe was capped and reburied until further abandonment can be achieved. Unfortunately the pipe was not photographed when exposed.4/14/2016 Same as last inspection.4/2/2015 Unable to locate. Pipe has been selected to be dug up and internally camera inspected.7/2/2014 Unable to locate.12/19/2013 Unable to locate7/23/2013 Same as last inspection. Unable to locate. FIELD\_STRUCT\_DESC: 42-inch corrugated metal drainage pipe through the levee, 16.5 feet below the crown. Metal flap gate on the waterside (WS) silted over. Brick "U" shaped headwall on the WS toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 16.29)]. FS Date: 5/1/2017 10:41:07 AM

# Photo 3 of 3: UCIP\_SP\_2018\_51759\_75098.jpg



Looking up WS slope: bare spot where pipe was previously excavated, video inspected, and backfilled.

LM Start	16.43	Rating **	М	Issue No.		70	_	
LM End	16.43	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Category	Category			Start		End		
Item	Animal Co	ontrol		39.3456	95 °	39.345695	٥	
пеш				-122.0228	20°	-122.022820	0	
DWR ID DWR_ST0003_01_f _ 2016_70								
	Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	17.58	Rating **	М	Issue No.		186			
LM End	17.58	Issue Type +	Ma	Location *					
Category	Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP LMA Respo	onsibility	39.35353	31 °	39.353531 °			
пеш				-122.00913	38°	-122.009138 °			
DWR ID									
	Comment Code								

## Inspector Comment

FS\_ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)].

FS Date: 5/1/2017 10:45:36 AM



Landside view: overview. No pipe found.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	17.58	Rating **	М	Issue No.		186 (cont)	
LM End	17.58	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	DWR UCIP LMA Responsibility			81 °	39.353531	
пеш				-122.00913	88°	-122.009138	
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:51762 DS\_ID:17329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

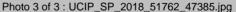
UCIP Comments: 4/20/2017 Abandoned- needs to be done properly. Pipe had a small leak during high water and is believed to be caused by the screw gate not being fully closed before it was reburied after its internal inspection. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned. (DWR Sutter Yard- AFreitag)6/15/2016 Pipe was dug up and internally cleaned and camera inspected on 11/18/2015 by Nor-Cal Pipeline Services. Pipe section through levee is about 93.8ft long. Inspection showed signs of rusting but no holes or other deterioration was found. WS end and slidegate were photographed, LS end was not. After the inspection pipe ends were capped and reburied until further abandonment can be achieved.4/2/2015 WS pipe end was dug up in preparation for internal camera inspection. Only steel slide gate structure found on waterside.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 15.8 feet below the crown. Slide gate on the waterside (WS) end. Both pipe ends are silted over. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 17.6)]. FS Date: 5/1/2017 10:45:36 AM

LM Start	17.58	Rating **	М	Issue No.	186 (cont)
LM End	17.58	Issue Type +	Ma	Location *	



Waterside view: slide gate steel structure





Waterside view: burried slide gate

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191	
LM End	18.61	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.36286	6°	39.362866 °	
пеш				-121.99799	3°	-121.997993 °	
DWR ID							

Comment Code

# Inspector Comment

FS\_ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)]. FS Date: 5/1/2017 10:52:46 AM

LM Start	18.61	Rating **	A/W	Issue No.	191 (cont)
LM End	18.61	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2018\_51770\_47399.jpg



Waterside view: overview of sliding gate structure

#### Photo 2 of 3: UCIP\_SP\_2018\_51770\_47398.jpg



Waterside view: outlet pipe with concrete headwall and floor appron.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	18.61	Rating **	A/W	Issue No.		191 (cont)
LM End	18.61	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.3628	66°	39.362866 °
пеш				-121.9979	93 °	-121.997993 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51770 DS\_ID:17345 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. Pipe is 155ft in total length and the inpsection showed some minor rusting but no holes or other deformations were found. Pipe is still used by the landowner for irrigation and the sloughing near the WS end was repaired and rocked to prevent future slloughing or erosion.4/14/2016 Sloughing repaired by Sutter Yard with rock revetment.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.Sloughing at outlet and levee slope is damaged due to sloughing.7/2/2014 It is not an abandoned crossing. Sloughing at outlet and levee slope is damaged due to sloughing.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate at the waterside (WS) toe. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.65)].

FS Date: 5/1/2017 10:52:46 AM



Waterside view: sloughing at outlet pipe

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.		192
LM End	18.70	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.364067°		39.364067 °
пеш				-121.9977	92°	-121.997792°
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM

# Photo 1 of 3 : UCIP\_SP\_2018\_51771\_47442.jpg



Waterside view: overview of slide gate structure

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.	192 (cont)		
LM End	18.70	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.364067°		39.364067 °	
пеш				-121.99779	2 °	-121.997792 °	
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM



Waterside view: 8-inch pipe inside 24-inch CMP

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	18.70	Rating **	A/W	Issue No.		192 (cont)
LM End	18.70	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Calegory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.36406	7°	39.364067 °
пеш					2 °	-121.997792 °
DWR ID						
Comment Code						

# Inspector Comment

FS\_ID:51771 DS\_ID:17346 EP\_NO: 9503

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/1/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)6/16/2016 Pipe was internally cleaned and camera inspected on 11/19/2015 by Nor-Cal Pipeline Services. 129.5 ft (starting from the WS end) was inspected to get get us through the levee prism but the LS end was never found. Pipe showed no signs of rust or damage.4/14/2016 Inlet structure still filled with soil.4/2/2015 Same as last inspection. Pipe has been selected for internal camera inspection.According to local people, the crossing is functional. The gap between 8-inch and 24-inch pipes is grouted with cement. Inlet structure is filled with soil.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 19 feet below the crown. 8-inch steel pipe sleeved through the 24-inch pipe. Annular space cement grouted. Slide gate at the waterside (WS) toe. Concrete inlet box on the landside (LS). (24-inch pipe [HLM 18.74] authorized under Automatic Board Order (ABO) issued as Permit No. 9503, 1974 - Baird). [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 18.74)].

FS Date: 5/1/2017 10:53:44 AM



Waterside view: 8-inch pipe and drain gate

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193
LM End	19.19	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.37003	1°	39.370031 °
пеш				-121.99645	8°	-121.996458°
DWR ID						

# Comment Code Inspector Comment

FS\_ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM

LM Start	19.19	Rating **	A/W	Issue No.	193 (cont)
LM End	19.19	Issue Type +	Ma	Location *	



Waterside view: overview of abandoned slide gate structure

#### Photo 2 of 3: UCIP\_SP\_2018\_51773\_47446.jpg



Landside view: overview (no pipes)

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	19.19	Rating **	A/W	Issue No.		193 (cont)
LM End	19.19	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.37003	1 °	39.370031 °
пеш				-121.99645	8 °	-121.996458°
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51773 DS\_ID:17347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- plugged. (DWR Sutter Yard-AFreitag)11/1/2016 Abandoned/plugged. (DWR Sutter Yard-AFreitag)6/16/2016 Internal camera inspection was done on 11/19/2015 by Nor-Cal Pipeline Servies. Pipe was inspected starting from the WS end and inspected upto the grout plug that is 13.7ft into the pipe. Pipe was then capped and reburied until further abandonment can be achieved.4/2/2015 WS end of pipe was dug up in preparation for internal camera inspection. Only steel slide gate structure found on WS.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 21.7 feet below the crown. Slide gate at the waterside (WS) toe. Pipe grouted on the WS end. [Additional Reference(s): DWR Levee Log, 2002. USACE Sacramento O&M Manual 136, March 1960 (HLM 19.24)].

FS Date: 5/1/2017 10:55:06 AM



WS pipe end and screw gate

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# Sutter Maintenance Yard East Levee Sacramento River

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194
LM End	19.55	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.37522	21 °	39.375221 °
пеш				-121.99587	78 °	-121.995878 °
DWR ID						

#### Comment Code

#### Inspector Comment

FS\_ID:51775 DS ID:17487 EP\_NO: N/A

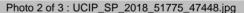
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection.7/24/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)]. FS Date: 5/1/2017 10:56:50 AM

LM Start	19.55	Rating **	М	Issue No.	194 (cont)
LM End	19.55	Issue Type +	Ma	Location *	



Waterside view: overview





Waterside view: abandoned and ruined pipe

Rating : Acceptable : Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	19.85	04/19/2018 04/19/2018	Bob Duffey

LM Start	19.55	Rating **	М	Issue No.		194 (cont)
LM End	19.55	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	zategory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.37522	11°	39.375221 °
пеш					'8	-121.995878 °
DWR ID						
Comment Code						

#### Inspector Comment

FS\_ID:51775 DS\_ID:17487 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 5/1/2017 10:56:50 AM

UCIP Comments: 4/20/2017 Abandoned- needs to be done so properly. (DWR Sutter Yard- AFreitag)11/1/2016 Abandoned.(DWR Sutter Yard- AFreitag)6/3/2016 Abandoned crossing.4/2/2015 Same as last inspection. Slide Gate WS not found. An abandoned pump and steel pipe found on WS. A 6 ft x 8 ft concrete distribution box with a CMP found on LS. Box filled with soil. An abandoned crossing.7/2/2014 Same as last inspection.12/19/2013 Same as last inspection. FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, invert 21.7 feet below the crown. Abandoned pump and steel pipe found on the waterside (WS). 6 foot by 8 foot concrete distribution box with the 36-inch corrugated metal pipe found on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 136, March 1960 (HLM 19.61)].



Waterside view: abandoned and ruined pipe

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	03/07/2018 03/07/2018	Bob Duffey

LM Start	0.02	Rating **	С	Issue No.		6	
LM End	0.02	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Erosion /	39.2320	53°	39.232053 °			
пеш			-121.995572 °		-121.995572 °		
DWR ID	DWR ID DWR_ST0003_02_s _ 2017_6						
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion sit	e prior to	the next in	spe	ction.	
		Inspecto	or Comm	nent			
The erosic	The erosion was repaired along the toe of the levee.						

No Photos

LM Start	0.02	Rating **	М	Issue No.		1
LM End	0.02	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Item	Vegetation			39.2320	58°	39.232058 °
пеш	tem				614°	-121.995514°
DWR ID	DWR_ST0	003_02_s _ 201	2_1			
		Comn	nent Cod	le		
V4 : Elderb	erries are	blocking visib	ility and	flood fight	сара	bility.
		Inspecto	or Comm	ent		

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Colusa Bypass	Right	2.20	03/07/2018 03/07/2018	Bob Duffey

LM Start	0.41	Rating **	Α	Issue No.		3	
LM End	0.41	Issue Type +	Ма	Location *		LS	
Earthen Levee			GPS L	atitud	e/Longitude		
Category				Start		End	
Item	Vegetatio	n		39.2314	123°	39.231423 °	
item			-121.988438 °		-121.988438 °		
DWR ID DWR_ST0003_02_s _ 2018_3							
		Comn	nent Cod	de			
V1 : Contro easements		grass and wee	ds on th	e levee slo	pes a	and	
		Inspecto	or Comm	nent			
Native grasses on both slopes are adequately maintained.							

Photo 1 of 1 : SP\_2018\_ST0003\_265\_3\_20180312\_00005.jpg

View of native grasses on both slopes.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Colusa Bypass	Left	2.29	03/13/2018 03/13/2018	Bob Duffey

LM Start	0.02	Rating **	С	Issue No.		9	
LM End	1.04	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Slope Sta	bility		39.2366	68°	39.239502°	
item		-121.9938	22 °	-121.975718°			
DWR ID DWR_ST0003_03_s _ 2017_9							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
		Inspecto	or Comm	nent			
The erosio	The erosion was repaired along the waterside slope and toe.						

No Photos

LM Start	0.25	Rating **	С	Issue No.		7	
LM End	0.25	Issue Type +	Ma	Location *	WS		
Category	GPS La	atitud	e/Longitude				
Category				Start		End	
Item	Erosion /	Erosion / Bank Caving				39.236155	o
пеш	)TTI				72°	-121.989572	0
DWR ID	DWR_ST0	003_03_f _ 2016	6_7				
		Comn	nent Cod	le			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
Inspector Comment							

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Colusa Bypass	Left	2.29	03/13/2018 03/13/2018	Bob Duffey

LM Start	0.48	Rating **	Α	Issue No.		1	
LM End	0.48	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetation			39.2369	88°	39.236988°	
пеш			-121.9853	90°	-121.985390°		
DWR ID	DWR_ST0	003_03_s _ 201	8_1				
		Comn	nent Coo	de			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	oes a	and	
easements	S.						
		Inspecto	or Comm	nent			
LMA shoul	LMA should continue to maintain native grasses on both slopes.						



View of the native grasses on both slopes.

LM Start	0.56	Rating **	С	Issue No.		4
LM End	0.56	Issue Type +	Ма	Location *		LS
Category	GPS Latitude/Longitude					
Calegory				Start		End
Item	Slope Stability			39.2372	20°	39.237220°
Item			-121.98390	08°	-121.983908°	
DWR ID	DWR_ST0	003_03_f _ 2016	6_4			
		Comn	nent Cod	le		
S1 : Repai	r slope ins	tability.				
			_			
Inspector Comment						
The landside slope was repaired.						

No Photos

LM Start	1.94	Rating **	М	Issue No.		10
LM End	1.94	Issue Type +	Ma	Location *	LS	
Category Earthen Levee			GPS La	atitud	le/Longitude	
Calegory				Start		End
Item	Vegetatio	n		39.2448	888°	39.244888 °
item	item				95°	-121.965595 °
DWR ID	DWR_ST0	003_03_s _ 201	2_10			
		Comn	nent Cod	le		
V4 : Elderk	perries are	blocking visib	ility and	flood fight	capa	ability.
			_			
		Inspecto	or Comm	ent		

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Colusa Bypass	Left	2.29	03/13/2018 03/13/2018	Bob Duffey

LM Start	2.04	Rating **	М	Issue No.		11
LM End	2.20	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Encroachments			39.2448	82 °	39.244908 °
пеш				-121.963752 ° -121.96		
DWR ID DWR_ST0003_03_s _ 2017_11						
		Comn	nent Cod	de		
DE : Debris						
Inspector Comment						
Remove the debris from the waterside slope and toe.						



View of the debris along the waterside slope and toe.

LM Start	2.13	Rating **	М	Issue No.		2	
LM End	2.13	Issue Type +	Ма	Location *		WS	
Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Vegetation			39.2449	25°	39.244925 °	
item						-121.962072°	
DWR ID	DWR_ST0	003_03_s _ 201	5_2				
	Comment Code						
V4 : Elderl	perries are	blocking visit	oility and	flood fight	сара	ability.	
	Inspector Comment						
•							

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Moulton Bypass	Right	0.30	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.00	Rating **	М	Issue No.		2
LM End	0.30	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS La	atituc	le/Longitude	
			Start		End	
Item	Vegetation			39.3381	55 °	39.335965 °
пеш				-122.0221	-122.017568 °	
DWR ID DWR_ST0003_04_s _ 2018_2						
		Comn	nent Cod	le		
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
Remove the native vegetation from the landside slope.						



View of the native vegetation along the landside slope.

LM Start	0.00	Rating **	С	Issue No.		1
LM End	0.31	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Vegetation			39.338155°		39.335883°
item				-122.0221	08 °	-122.017563°
DWR ID DWR_ST0003_04_s _ 2018_1						
		Comn	nent Cod	le		
V1 : Contro easements		rass and wee	ds on th	e levee slo	oes a	and
Inspector Comment						
Removed the native vegetation from the waterside slope.						

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Sutter Maintenance Yard East Levee Sacramento River**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 05 Moulton Bypass	Left	2.19	04/19/2018 04/19/2018	Bob Duffey

LM Start	0.00	Rating **	М	Issue No.		3
LM End	2.18	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Item	Vegetation			39.3472	75 °	39.336862°
пеш				-122.0153	-121.984985 °	
DWR ID DWR_ST0003_05_s _ 2017_3						
		Comn	nent Cod	le		
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slop	oes	and
easements	S.					
		Inspecto	or Comm	nent		
Trim/maintain the native vegetation on the landside slope.						



View of the native vegetation along the landside slope.

LM Start	0.00	Rating **	M	Issue No.		4
LM End	2.18	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS Latitude/Longitude			
				Start		End
Item	Vegetation			39.347275°		39.336862 °
пеш		-122.015353			53°	-121.984985 °
DWR ID DWR_ST0003_05_s _ 2017_4						
		Comn	nent Cod	le		
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
Trim/maintain the native vegetation on the waterside slope.						



View of the native vegetation along the waterside slope.